

release in a down gradient direction, and a groundwater sample must be collected and analyzed using approved methods.

What do the Results Mean and What are the Reporting Requirements?

If the results of the site check indicate that no soil contamination equals or exceeds 10 mg/kg Total Petroleum Hydrocarbons (TPH) for petroleum *(or exceeds the soil-to-groundwater maximum soil contaminant concentrations (MSCC), or the Method Detection Limit (MDL) if no MSCC is established, for regulated hazardous substances)*, no groundwater contamination exceeds the groundwater quality standard established in 15A NCAC 2L .0202, and no free product is present, then the results must be reported to the UST Section in a Site Check Report. The Site Check Report must be submitted to the branch of the UST Section that requested it (Permits and Inspections Branch, if required by a UST inspector, or the appropriate regional office of the Corrective Action Branch, if required by an incident manager). The Site Check Report must be received by the UST Section within 30 days of the receipt of the Notice of Regulatory Requirements or the Notice of Violation. If it was necessary to remove all or part of the UST system to allow access for site check sampling, then the required UST closure report elements should be submitted as part of the Site Check Report.

If the results of the site check indicate that soil contamination equals or exceeds 10 mg/kg TPH for petroleum *(or exceeds the soil-to-groundwater MSCCs, or the MDL if no MSCC is established, for regulated hazardous substances)*, groundwater contamination exceeds the 2L standards, or free product is present, then initial response and abatement actions must be performed. Initial response actions which are required include submittal of a UST-61, 24-Hour Release and UST Leak Reporting Form to the UST Section within 24 hours following discovery of the release; action to stop the release; and identification and mitigation of hazards from exposure to pollutants.

Initial abatement actions include determination of the source of the release (if not previously identified); investigation and removal of free product; submittal of a 20-Day Report to the UST Section within 20 days following discovery of the release; and excavation of contaminated soil to the maximum extent possible,

followed by confirmation sampling. The final results of the initial abatement actions for a petroleum release must be reported in an Initial Abatement Action Report, which must be submitted to the UST Section within 90 days following discovery of the release. *(The final results of the initial abatement actions for a hazardous substance release must be reported in a 45-Day Report)*

The 24-Hour Report, the 20-Day-Report, and the Initial Abatement Action Report *(or the 45-Day Report, for a hazardous substance release)* must be submitted to the branch of the UST Section that requested it (Permits and Inspections Branch, if required by a UST inspector, or the appropriate regional office of the Corrective Action Branch, if required by an incident manager). If it was necessary to remove all or part of the UST system to allow access for site check sampling and/or excavation, then the required UST closure report elements should be submitted as part of the Initial Abatement Action Report. .

If the Initial Abatement Action Report for a petroleum release shows that post-excavation soil contaminant concentrations do not exceed the lower of the soil-to-groundwater or residential MSCCs and reports that neither groundwater nor bedrock has been encountered in the excavation, then no further action will be required. However, if the Initial Abatement Action Report indicates that soil contaminant concentrations exceed the lower of the soil-to-groundwater or residential MSCCs or reports that groundwater or bedrock has been encountered in the excavation, then the responsible party must perform further assessment and submit a Limited Site Assessment Report within 120 days of the discovery of the release.



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Site Check Guidelines for Regulated UST Systems



**N.C. Department of
Environmental Quality**

**Division of Waste Management
UST Section**

Site Check Requirements

When is a Site Check Required?

A site check is required when environmental conditions indicate that a release from a UST system may have occurred or when a UST system component fails a tightness test or exhibits an unusual operating condition that could result in a release to the environment. Some examples of conditions that require a site check are discovery of stained soil around dispensers, fill pipes or submersible pumps, free product on surface water or ground water, failing tank or line tightness tests or failing tightness tests for spill buckets or containment sumps.

What is a Site Check?

A site check is an environmental assessment that requires soil sampling where contamination is observed or is most likely to be present at the site. In some cases, the UST Section may require groundwater samples to be collected.

What are the Sampling Requirements?

This brochure summarizes the Site Check requirements. For detailed guidance about sampling locations, sample analyses and analytical methods, soil cleanup standards (maximum soil contaminant concentrations), report formats and other requirements, please refer to the UST Section's most recent version of *Guidelines for Site Checks, Tank Closure, and Initial Response and Abatement for UST Releases (STIRA)*.

General sampling procedures are described below. If the source and cause of a suspected release are known and the area of the suspected release is localized, then it may not be necessary to collect soil samples from around the entire UST system as shown in the following sections. Sampling would only be required around the component in the area of the suspected release. Prior UST Section approval is required to perform a localized site check.

Soil Sampling

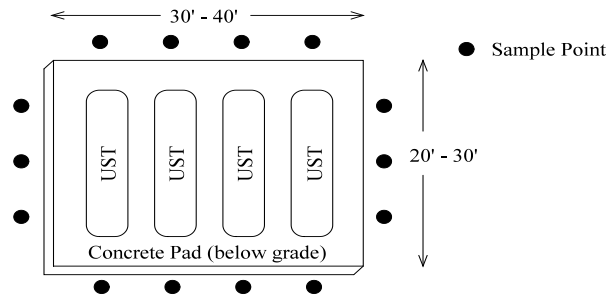
For sampling around UST(s), the procedures listed below must be performed:

Soil samples must be collected around the perimeter of a single UST or around the perimeter of a set of

USTs in a single pit, according to the sampling procedure listed below. Samples must be collected within 3 feet of the UST(s) at a depth equal to the depth of the tank bottom(s) or no deeper than 2 feet below the depth of the tank bottom into the native soil;

The minimum number of samples required per side around the perimeter of the UST(s), are as follows:

Less than 6 feet	-----	1 sample
6 to 20 feet	-----	2 samples
>20 to 30 feet	-----	3 samples
>30 to 40 feet	-----	4 samples
>40 to 50 feet	-----	5 samples
Greater than 50 feet	-----	1 sample per 10 ft. of pad length



One sample must be collected at the fill port of each UST (or under any catchment basin at the fill port) to document overfills;

Soil samples must also be collected underneath associated product lines, dispensers, containment sumps, turbine pumps or turbine containment sumps, and other areas where contamination is suspected or observed, as described below:

For sampling under product lines (including lines under dispenser islands) the procedures listed below must be performed:

- Samples must be collected **no deeper than 2 feet** into the native soil beneath the product lines;
- A minimum of one sample must be collected for each 10 linear foot interval along a line (and if the line is less than 10 feet in length, one sample still is required);
- Samples must be collected at all fittings, especially joints, or wherever there is heightened potential for a release, and at all

locations where staining is present or where contamination is suspected;

- Samples are required under product lines even if it is planned that the lines remain for use with replacement UST(s).

For sampling under dispensers, the procedures listed below must be performed:

- Samples must be collected **no deeper than 2 feet** into the native soil directly below each individual dispenser;
- Samples must be collected **no deeper than 2 feet** into the native soil directly below all couplings, pumps, and containment sumps, or wherever there is heightened potential for a release, and at all locations where staining is present or where contamination is suspected;
- Samples are required under dispensers even if it is planned that the dispensers remain for use with replacement UST(s).

For sampling under containment sumps and other areas where contamination is suspected, the procedures listed below must be performed:

Samples must be collected **no deeper than 2 feet** into the native soil directly below containment structures and other areas where contamination is suspected or observed. Samples must be taken from directly below the piping that enters the sump and beneath any defective area of the sump. If the containment sump is sitting directly on the tank, thereby preventing collection of samples under the sump, then samples must be collected along the perimeter of the sump within one foot of the sump. In addition, samples must be collected from any area where contamination is observed.

Note also that if the UST system contains an ethanol-gasoline blend, the UST Section will determine if the assessment required in previous sections is adequate.

Ground Water Sampling

If required by the UST Section, a permanent monitoring well, constructed according to Title 15A NCAC 2C, Well Construction Standards, must be installed as close as possible to and within 5 feet of the (part of the) UST system with the (suspected)